

**Notice of Allowability**

Application No.

10/806,210

Examiner

Mark W. Bockelman

Applicant(s)

YAGI ET AL.

Art Unit

3766

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3-23-2006.
2. ☒ The allowed claim(s) is/are 1-6.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

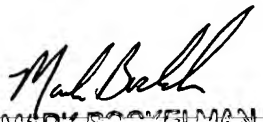
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
MARK BOCKELMAN  
PATENT EXAMINER

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jonathan on Backenstose.

The application has been amended as follows:

Claim 1 is amended as follows:

1. A visual restoration aiding device for restoring vision of a patient, comprising:
  - an electrode array having a plurality of electrodes which apply [an] electrical stimulation pulse [signal] signals to cells constituting a retina of an eye of the patient, the electrodes including first electrodes and second electrodes;
  - a photographing unit which photographs an object to be recognized by the patient to provide at least one photograph frame of the object;
  - a converting unit which converts photographic data transmitted from the photographing unit to data for electrical stimulation pulse signals; and
  - a control unit which outputs the electrical stimulation pulse [signal] signals through each electrode based on the data for electrical stimulation pulse signals, the control unit simultaneously outputting a portion of the electrical stimulation pulse signals only through the first electrodes during a first time period [for recognizing the object of one frame] so as not to simultaneously output another portion of the

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electrical stimulation pulse signals through the second electrodes [for recognizing the object of one frame] that are arranged within a distance [that] from the first electrodes whereby the portion of the electrical stimulation pulse signals outputted through the first electrodes will not interfere with the another portion of the electrical stimulation pulse signals outputted through the second electrodes,

the control unit switching from outputting the portion of the electrical stimulation pulse signals through the first electrodes [and] to outputting the another portion of the electrical stimulation pulse signals through only the second electrodes during a second time period, [with a lapse of time within a duration needed for allowing the patient to recognize the object of the one frame, and]

the control unit completely terminating the outputting of the electrical stimulation pulse signals through all of the first and second electrodes [necessary for recognizing the object of one frame within a duration needed for allowing the patient to recognize the object of one frame] whereby each photograph frame provided by the photographing unit results in electrical stimulation pulse signals applied to the first and second electrodes in a time division manner.

The following is an examiner's statement of reasons for allowance: The prior art of record does not teach or suggest the time division application of stimulation signals so as to improve resolution via electrode density.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark W. Bockelman whose telephone number is (571) 272-4941. The examiner can normally be reached on Monday - Friday 10:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272 -6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MWB

May 30, 2005

  
MARK BOCKELMAN  
PRIMARY EXAMINER